# PEDI-IMMOBILIZER<sup>TM</sup> INSTRUCTION MANUAL

## INTRODUCTION



Your **Pedi-Immobilizer<sup>TM</sup>** was designed to restrain and immobilize any small child with a potential spinal injury. The device can also be used for extrication of these small patients in hard to reach places such as the floorboard of a vehicle. It allows easy removal of infants from car seats. The device can be used on medical calls when it may be necessary to only restrain a patient and can be applied for use in water rescue. NOTE: Remember the conscious patient will be frightened and may experience some hysteria when immobilized. A patient in respiratory distress (asthma, epiglotitis) will also be frightened and anxious. These patients require careful evaluation before a decision to immobilize or restrain is made.

The Pedi-Immobilizer<sup>™</sup> should only be used on infants or children up to 60 lbs. A child weighing more should be immobilized utilizing other equipment.

We recommend that instructions be reviewed carefully so that the personnel applying the device to patients will understand its correct use. This should be accomplished through training sessions prior to placing the device in service. It should also be used under the advisement of your local medical director. Please feel free to call us toll free at 1-800-933-PEDI if you have questions about application of the device.

### APPLICATION OF DEVICE

A primary assessment should always be completed on any traumatized or injured patient. Upon completion of the total body assessment, any patient suspected to have cervical spine injury can be immobilized using the following method:

A RESCUER SHOULD BE DESIGNATED TO APPLY INLINE MANUAL SUPPORT THE ENTIRE TIME THAT THE PATIENT IS BEING STABI-LIZED AND/OR EXTRICATED IN THE PEDI-IMMOBILIZER DEVICE. IF APPROPRIATE AT THIS TIME, A PEDIATRIC CERVICAL COLLAR CAN BE APPLIED.

**STEP 1**: When immobilizing infants and children for suspected cervical spine injuries, one important factor must be remembered. The child's head will be large in comparison to its body. A child in the supine position will actually have flexion of the head causing improper spinal alignment. Exercise caution here to prevent hyperextension.

## **RECOMMENDED GUIDELINE FOR SHOULDER PAD PLACEMENT**

SAFE AND PROPER ALIGNMENT IS ACCOMPLISHED WHEN EXTERNAL AUDITORY MEATUS (EAR) IS ALIGNED WITH SHOULDERS. THE PAD IS PLACED UNDER THE SHOULDERS AS PATIENT IS BEING POSITIONED ONTO THE IMMOBILIZER. REMEMBER, SECURE INLINE MANUAL SUP-PORT IS NECESSARY WHILE THIS IS BEING ACCOMPLISHED. (If pad is unavailable, or extra lift is needed, use trauma dressing, sheets, etc. to supplement the pad.)



**STEP 2**: For extrication, the immobilizer should be slid under the patient's body. The head should be centered between the Velcro pieces and the shoulders should be even with the top part of the black diagonal straps. The straps on the device should remain rolled up until the patient is positioned properly.

**STEP 3**: While continuing manual cervical support, place the head pads, one at a time, snug against the patient's head. Velcro facing outwards. (The ears should be checked for fluid if trauma is involved.) Once the head pads are in place, head and chin straps should be applied. The smaller inside straps attach to the Velcro on the head pad sides. The longer outside strap fits through the plastic loops on the immobilizer. Once the long strap is in place, it will lock back onto itself securely, insuring a snug fit.

STEP 4: Following the head placement, the black diagonal cross straps are secured.



**STEP 5**: The orange leg strap located at the base of the Immobilizer is provided for additional security when the device is used for a taller or more combative patient.



**STEP 6**: The placement of the abdominal strap should now follow. This strap may be loosened if use of a M.A.S.T. suit is indicated.

STEP 7: Chest strap placement is last so that observation of the chest can be facilitated. The chest strap may be loosened if protocol calls for an I.V. or if exam of the chest area is necessary.

THE PATIENT IS NOW SECURE IN THE PEDI-IMMOBILIZER. BACKBOARD AND STRETCHER STRAPS SHOULD BE USED IN CONJUNC-TION WITH THE DEVICE DURING TRANSPORT.

IT IS OUR STRONG RECOMMENDATION THAT THE DEVICE BE USED UNDER THE ADVISEMENT OF YOUR MEDICAL DIRECTOR OR LO-CAL MEDICAL AUTHORITY. PROPER APPLICATION OF THE DEVICE SHOULD BE REVIEWED AND PRACTICED PRIOR TO ITS USE.

# IMMOBILIZATION WITH INFANT IN CAR SEAT

EQUIPMENT NEEDED- Pedi-Immobilizer<sup>TM</sup>, long board, straps. All equipment should be checked at shift change.

A. Evaluate the patient (A, B, C's) while leaving the infant in the car seat.]

B. First rescuer holds gentle, inline manual support on the patient. If appropriate size cervical collar is available, it should be applied at this time.

C. The second and third rescuers remove the car seat from the vehicle to an open area.

D. The second and third rescuers should remove car seat straps from around the infants, while manual support is maintained. The Immobilizer is placed behind the infant by sliding it down the infant's back.

E. All three rescuers work together. With first rescuer remaining in control, tilt the car seat on it's back, bringing it to rest on a long backboard.

F. The infant is then slid onto the Immobilizer with the shoulders at the top of the red diagonal cross straps with the head centered between the Velcro, the child's shoulders should be elevated at this time, with the foam shoulder pad, to achieve optimal spinal alignment.

G. At this point, refer to Instruction Guidelines Steps 3-7 under Application of Device.

### CLEANING AND STORAGE OF THE PEDI-IMMOBILIZER™

The material used in the Pedi-Immobilizer<sup>TM</sup> is urethane coated for water repellency and not affected by mildew. It can be easily cleaned with mild soap and cool water or a 10% bleach solution and thorough rinsing. (Some discoloration may occur after repeated cleaning or too strong bleaching.) Air dry thoroughly. Avoid direct sunlight.

The foam pieces are made from material that does not absorb fluids. They are easily cleaned with a mild soap or a 10% bleach solution and wiped dry.

The device should be returned to its carrying case with the head pads placed sideways at the bottom of the case. This will provide room in the case for cervical collar storage.



# WARRANTY

This unit is warranted for one year from date of purchase to be free from defects in materials, components or workmanship. This warranty does not apply to any defects, malfunction, failure or damage caused by, or resulting from misuse, abuse, or negligence, or from modifications to any part of the unit. This warranty is listed to repair or replacement of defective parts; the manufacturer assumes no responsibility for injury resulting from the use of this unit. If the product should become defective within the warranty period, we will elect to repair or replace it free of charge at our option, including free return shipment, provided it is delivered prepaid. Before returning any unit, notify the manufacturer of the problems and complete instructions will be issued. No persons, agent, distributor, dealer or company is authorized to change, modify or amend the terms of this warranty.

The manufacturer recommends that the instructions be read carefully so that personnel who will be applying the device to patients will understand it correct use. This can be accomplished through training sessions prior to placing the unit in service. It should also be used under direction of your local medical authority.